

Date: Fri, 25 Mar 94 13:44:01 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #328  
To: Info-Hams

Info-Hams Digest                        Fri, 25 Mar 94                        Volume 94 : Issue 328

Today's Topics:

    93 Quest-How to Mount A 2m Antenna?  
        ATV transmitter components  
            Colorado Hamfest  
    Daily Summary of Solar Geophysical Activity for 24 March  
        EM Spectrum Allocations  
            Hamfest Listing  
            Heath 2036 manual  
        Info-Hams Digest V94 #327  
    Kenwood (TS-850) Computer Interface Info Wanted  
        QSLing packet messages? (2 msgs)  
            Voice Mail on Repeaters  
            Why no 10 meter activity??  
    Yaesu 5200 Develops new "Feature"?!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>

Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

---

Date: Fri, 25 Mar 1994 13:19:38  
From: usc!howland.reston.ans.net!europa.eng.gtefsd.com!news.umbc.edu!eff!  
news.kei.com!yeshua.marcam.com!zip.eecs.umich.edu!newsxfer.itd.umich.edu!jobone!  
opeo!eve120.cpd.ford.@ihnp4.ucsd.edu  
Subject: 93 Quest-How to Mount A 2m Antenna?  
To: info-hams@ucsd.edu

In article <henrysCn4C3F.8tK@netcom.com> henrys@netcom.com (Henry B. Smith)  
writes:  
>From: henrys@netcom.com (Henry B. Smith)

>Subject: Re: 93 Quest-How to Mount A 2m Antenna?  
>Date: Wed, 23 Mar 1994 12:59:39 GMT

>Miles Abernathy (miles@mbs.telesys.utexas.edu) wrote:  
> deleted...  
> ... with the help of the shop manual, I can't figure out how to get the  
> headliner out to drill the hole...there are 3" wide plastic retainers all  
> around that seem remarkably immovable.  
>  
> There is inadequate room ("depth") above the dome light to mount the  
> antenna there and still put the dome light back in. All windows except the

Well, I have a '93 Villager, which is virtually identical, and those plastic retainers are held on by fierce, ball-and-post patches which are sorta like industrial stiff velcro. Also, the strips "shingle" on one another, so start with the one on the bottom of the pillar behind the passenger seat/in front of the side door, and work your way up. I removed the dome light and snaked the cable towards the side door, fishing for it with a straightened coat hanger. I then used tie-wraps to hold the cable in place all the way down to the floor. Next, I ran the cable under the passenger rocker panel and snaked it up under the dash behind the kick panel. I used a Larson NMO mount under the dome light, and it fits fine; there's enough give in the headliner for everything to fit well. I mounted an Icom IC-28H in the DIN slot under the broadcast radio/cassette, where the optional CD player would go (remove the one external screw thats on the bottom side of one of the fascia crossbars and the whole front pops off). During the week, I spin a 1/4 wave on the NMO so I can get into my work parking structure, but on the weekends the 5/8 wave goes up. I've got 40,000+ miles on the setup, two Michigan winters, and it works like the proverbial champ.

(BTW, I'm only a contractor to Ford, so they don't even really let me know what the corporate opinion is, so I can hardly represent anybody but myself. Park and Lock, not responsible...  
Your milage may vary, Some settling may occur...

73 de Jeff N8KPA@N8NNN.#SEMI.MI.USA

---

Date: Fri, 25 Mar 1994 16:59:54 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!EU.net!sun4nl!tudelft.nl!  
iri.tudelft.nl!hersman@network.ucsd.edu  
Subject: ATV transmitter components  
To: info-hams@ucsd.edu

Hello ,

Recently in Holland a magazine published an ATV transmitter, designed

by G4WIM .

The problem is that some components are'nt available in holland, the

MC145151P2 (Motorola) and M67715 (Mitsubishi).

Maybe someone knows how to get these components ?  
Please email and thanks in advance.

Addy Hersman  
hersman@iri.tudelft.nl

Date: Fri, 25 Mar 1994 16:39:47 GMT  
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!server!  
stortek.com!patrick\_tatro@network.ucsd.edu  
Subject: Colorado Hamfest  
To: info-hams@ucsd.edu

\*\*\*\*\* JUST ONE WEEK UNTIL THE LARCFEST 94 \*\*\*\*\*  
\*\*\*\*\* Longmont Colorado's Ham and Computer Swap  
Boulder County Fairgrounds - Longmont Colorado  
Saturday, April 2 8:00AM to 3:00PM  
Sponsored by the Longmont Amateur Radio Club  
Admission \$3.00 per Adult  
Tables Available at \$7.00

Talk-In 147.87/.27 Simplex 146.52  
VE Exam Session  
Food and lots of coffee available  
Campsites/Camper Hookups Available -- Call 303-676-1525  
For More Information Call  
(Day) John Stransky KF0RQ 303-776-2110  
(Evening) Randy Stevens N0NMD 303-499-1106

Date: Thu, 24 Mar 1994 21:38:31 MST

**From:** agate!howland.reston.ans.net!news.intercon.com!panix!zip.eecs.umich.edu!  
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!utcsri!newsflash.concordia.ca!  
canopus.cc.umanitoba.ca!tribune.@ihnp4.ucsd.edu  
**Subject:** Daily Summary of Solar Geophysical Activity for 24 March  
**To:** info-hams@ucsd.edu

## DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

24 MARCH, 1994

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 24 MARCH, 1994

NOTE: A large and intense area of stratospheric warming exists from central and southern Europe to central and northern Siberia. The warm air is spreading northeastwards.

```
!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 083, 03/24/94
10.7 FLUX=092.7 90-AVG=105      SSN=046      BKI=4215 4222  BAI=016
BGND-XRAY=B1.2      FLU1=2.4E+06  FLU10=1.7E+04 PKI=4325 4222  PAI=016
BOU-DEV=040,010,009,073,063,017,010,017    DEV-AVG=030 NT      SWF=00:000
XRAY-MAX= C3.6 @ 2219UT      XRAY-MIN= B1.0 @ 0933UT      XRAY-AVG= B2.4
NEUTN-MAX= +002% @ 2315UT      NEUTN-MIN= -002% @ 2205UT      NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 2355UT      PCA-MIN= -0.4DB @ 1610UT      PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 0244UT      BOUTF-MIN=55314NT @ 1809UT      BOUTF-AVG=55330NT
GOES7-MAX=P:+000NT@ 0000UT      GOES7-MIN=N:+000NT@ 0000UT      G7-AVG=+074,+000,+000
GOES6-MAX=P:+122NT@ 1819UT      GOES6-MIN=N:-088NT@ 0500UT      G6-AVG=+093,+021,-042
FLUXFCST=STD:095,095,100;SESC:095,095,100 BAI/PAI-FCST=010,010,010/015,010,010
KFCST=1112 2111 1112 3111 27DAY-AP=014,005 27DAY-KP=1254 2232 2122 2111
WARNINGS=
ALERTS=
!!END-DATA!!
```

NOTE: The Effective Sunspot Number for 23 MAR 94 was 35.8.

The Full Kp Indices for 23 MAR 94 are: 3+ 5- 30 3+ 4- 3- 2+ 2-

The 3-Hr Ap Indices for 23 MAR 94 are: 20 36 16 17 21 14 9 7

Greater than 2 MeV Electron Fluence for 24 MAR is: 3.4E+08

## SYNOPSIS OF ACTIVITY

Solar activity was very low. Two newly emerged regions were numbered today: Region 7694 (N11E44) and Region 7695 (S17E62). Both are small C-type groups. All of the groups on the disk were quiet and stable.

Solar activity forecast: solar activity is expected to be

very low to low.

The geomagnetic field was mostly quiet to unsettled but there were some active to storm level periods. Specifically there was a period (from 0900-1500Z) of minor storm levels with some high latitude major storm conditions, and an active period from 0000-0300Z.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled for the next three days.

Event probabilities 25 mar-27 mar

Class M	01/01/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 25 mar-27 mar

A. Middle Latitudes

Active	10/10/10
Minor Storm	05/05/05
Major-Severe Storm	01/01/01

B. High Latitudes

Active	10/10/10
Minor Storm	05/05/05
Major-Severe Storm	01/01/01

HF propagation conditions were generally near-normal over all regions. Night sector transauroral and transpolar circuits experienced minor signal degradation and below-normal propagation between approximately 09:00 UTC and 12:00 UTC during a period of enhanced geomagnetic and auroral activity. Conditions then began returning to near-normal by the end of the day. This activity did not appear to have a substantial impact on middle latitude paths. Similar conditions are expected over the next 3 days, through 27 March inclusive. High and polar latitudes could still see periods of night-sector signal degradation during sporadic substorm activity.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

=====

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 24/2400Z MARCH

-----  
NMBR LOCATION LO AREA Z LL NN MAG TYPE  
7692 N18W47 161 0020 HAX 01 001 ALPHA  
7693 N08W85 199 0040 HSX 01 001 ALPHA  
7694 N11E43 071 0010 HRX 01 001 ALPHA  
7695 S17E61 053 0020 CRO 05 003 BETA  
REGIONS DUE TO RETURN 25 MARCH TO 27 MARCH  
NMBR LAT LO  
7684 S08 007

LISTING OF SOLAR ENERGETIC EVENTS FOR 24 MARCH, 1994

-----  
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP  
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 24 MARCH, 1994

-----  
BEGIN MAX END LOCATION TYPE SIZE DUR II IV  
NO EVENTS OBSERVED

INFERRRED CORONAL HOLES. LOCATIONS VALID AT 24/2400Z

-----  
ISOLATED HOLES AND POLAR EXTENSIONS  
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN  
70 N33W44 S13W74 S13W74 N37W44 171 ISO POS 011 10830A  
71 S30E21 S30E21 S17W08 S05E08 102 ISO POS 008 10830A  
72 N21E44 N07E24 N10E21 N23E36 077 ISO POS 004 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

-----  
Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz  
-----  
23 Mar: 0023 0028 0033 B2.7  
0246 0253 0304 B2.0  
0353 0357 0401 B2.0  
1119 1126 1136 SF 7692 N18W24  
1152 1200 1206 B1.9 SF 7692 N18W23  
1213 1219 1224 B2.6 SF 7692 N18W23  
1303 1306 1310 B1.9 SF 7693 N08W64  
1603 1607 1611 B2.0  
1952 2038 2119 B3.9

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

---

	C	M	X	S	1	2	3	4	Total	(%)
--	--	--	--	--	--	--	--	--	--	--
Region 7692:	0	0	0	3	0	0	0	0	003	(33.3)
Region 7693:	0	0	0	1	0	0	0	0	001	(11.1)
Uncorrellated:	0	0	0	0	0	0	0	0	005	(55.6)

Total Events: 009 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

---

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
--	--	--	--	--	--	--	--	--

NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

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Date: 25 Mar 1994 16:50:02 GMT

From: ihnp4.ucsd.edu!mvb.saic.com!news.cerf.net!usc!math.ohio-state.edu!  
magnus.acs.ohio-state.edu!csn!news.sinet.slb.com!smr201.montrouge.smr.slb.com!  
user@network.ucsd.edu

Subject: EM Spectrum Allocations  
To: info-hams@ucsd.edu

Could anyone point me to a file which would have latest frequency allocations,  
for the complete spectrum, by countries? (Not only amateur frequencies,  
such  
as ftp-able from arrl.org)?

-- E. Danois --

---

Date: 25 Mar 94 14:55:04 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Hamfest Listing  
To: info-hams@ucsd.edu

>I've been searching around for a listing of upcoming hamfests, and have  
>been unable to find one. So, I've decided to do the next best thing -  
>create my own.

i'm assuming you are looking for an electronic one?

they're published in just about all the amateur radio magazines, especially  
QST, CQ, 73 and Worldradio, if you're looking for a "printed" one.

an electronic one would be neat.

bill wb9ivr

---

Date: 25 Mar 1994 18:32:50 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!  
usenet.ins.cwru.edu!cleveland.Freenet.Edu!ck146@network.ucsd.edu  
Subject: Heath 2036 manual  
To: info-hams@ucsd.edu

I missed the original post, but I too have a manual for this  
radio, but at 150+ pages, I'm not excited about copying the whole  
thing. I can copy whatever parts the original poster needs, and  
thanks to some previous help from netland, I have the schematic.

Let me know if this would help (E-mail please).

de Bill, KD6MCI  
wakirisan@ananov.remnet.ab.com

-----  
Date: 25 Mar 94 18:37:53 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Info-Hams Digest V94 #327  
To: info-hams@ucsd.edu

From: POSTMSTR @SSW  
To: HCHOAGLAND @MRGATE  
IN%"Info-Hams @UCSD.EDU" @MRGATE @BV8500

Author: IN%"Info-Hams@UCSD.EDU"  
Sender: IN%"INFO-HAMS @UCSD.EDU"@MRGATE@BV8500  
Subject: Info-Hams Digest V94 #327  
Message Class:

Recipients:

Profile Recipient(s):

CCMAIL -RL636614 \*RLMEYERING @CCMAIL @BIIVAX

The MAILbridge Server/DEC was unable to deliver mail  
from Sender IN%"INFO-HAMS@UCSD.EDU"@MRGATE@BV8500.  
Please contact your Soft-Switch E-Mail Administrator to register this user  
in the Name Translate Directory.

-----  
Date: Fri, 25 Mar 1994 14:46:49 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.utdallas.edu!corpgate!  
nrtpa038!brtph560!tcain@network.ucsd.edu  
Subject: Kenwood (TS-850) Computer Interface Info Wanted  
To: info-hams@ucsd.edu

In article <940324100422\_6@ccm.hf.intel.com> Cecil\_A\_Moore@ccm.hf.INTel.COM (Cecil A Moore) writes:  
>Hi Adam and anybody else...  
>  
>I have an ICOM-725 which has a single-line bi-directional TTL-level  
>wired-OR serial asynchronous interface for external control. Is the  
>Kenwood TS-850 the same hardware interface characteristic as the  
>ICOM-725?

>  
>thanks and 73, Cecil, KG7BK (I do not speak for Intel on Internet)

Cecil, I'm using the simple interface design that was in 73 about 1-2 years ago. FAR Circuits sells a simple board for it for about 5 bucks. The circuit is a couple transistors available anywhere and is powered by the TR line.

Tom

--  
Tom Cain WB80UE@ko23 tcain@bnr.ca

-----  
Date: Thu, 24 Mar 1994 21:51:22 EDT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!newsserver.jvnc.net!jvnc.net!  
Gerry\_Jurrens%walnut.prs.k12.nj.us@network.ucsd.edu  
Subject: QSLing packet messages?  
To: info-hams@ucsd.edu

I agree that it seems a little silly to exchange QSL cards for an exchange of packet messages, yet the PBBS is full of solicitations (CQs, etc.) imploring certain states to come forth with replies! I guess if you're an apartment dweller with a no-code tech and a rubber duckie a block from the nearest packet board, it's a way of getting your jollies!

One thing is sure: in ham radio, there's something for everyone!

73,

Gerry N2GJ

-----Princeton Regional Schools takes no responsibility for the accuracy or content of the above message.

-----  
Date: Fri, 25 Mar 1994 18:05:30 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!math.ohio-state.edu!  
sol.ctr.columbia.edu!usenet.ucs.indiana.edu!indyvax.iupui.edu!  
medicine.dmed.iupui.edu!JAY@network.ucsd.edu  
Subject: QSLing packet messages?  
To: info-hams@ucsd.edu

A QSO is "A conversation between two radio amateurs". A QSL card is "A postcard that serves as a confirmation of communication between two hams."

(These are quoted from "Now You're Talking" Copyright 1993 by ARRL.

When you look at these definitions, QSL cards for exchange of packet messages makes sense. Email messages are conversation between two radio amateurs, so that makes it a QSO. If email messages are a QSO, then a QSL card would be appropriate. Using these definitions, a QSL card would be acceptable as a confirmation of a phone call or a person to person conversation.

I'm not "an apartment dweller with a no-code tech and a rubber duckie a block from the nearest packet board" but I don't see any reason why a person that meets this description would be treated any different from other hams.

I'll have to look in my copy of Part 97 to see if an apartment dweller with a no-code tech and a rubber duckie a block from the nearest packet board has less rights to enjoy ham radio.

Jay  
KA9OKT

>I agree that it seems a little silly to exchange QSL cards for an exchange of packet messages, yet the PBBS is full of solicitations (CQs, etc.)  
>imploring certain states to come forth with replies! I guess if you're an  
>apartment dweller with a no-code tech and a rubber duckie a block from the  
>nearest packet board, it's a way of getting your jollies!

>One thing is sure: in ham radio, there's something for everyone!

>73,

>Gerry N2GJ

>-----Princeton Regional Schools takes no responsibility for the  
> accuracy or content of the above message.

-----  
Date: 25 Mar 94 14:57:17 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Voice Mail on Repeaters  
To: info-hams@ucsd.edu

--  
RE: Voice Mail on Repeaters

>I have only heard voice mailboxes on the ACC garbage.  
>I know that other repeater controllers have voice mailboxes.

We have the feature on our MicroControl Mark II repeater on 147.00MHz

in Hammond, LA (SouthEast Louisiana Amateur Radio Club)

>How does voice mail on a ham repeater perform? I am curious  
>about actual users' experiences.  
>If each member has an assigned voice mailbox, then that ...  
>Even if the repeater announces that messages are waiting ...

Works quite well; punch member box number (we tie it to member speed dial numbers on the autopatch) and record code and leave message. Messages are announced by the repeater or a listing can be requested by the user.

>Is voice mail something that many hams want on their  
>favorite repeater?  
>Comments welcome.

SELARC members requested the feature; it works well as a message or as a club announcement feature (we have one box assigned to the club so anyone can leave a message of general interest). It is especially handy when a ham is not on frequency and can't be reached by autopatch -- even hams passing thru can leave a personalized greeting for someone with the help of one of our members....sure beats "tell old Bob that WB5FBS said hello..sorry I missed him!"

Bob Priez, WB5FBS  
bobpriez@selu.edu

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Date: 25 Mar 1994 12:26:09 -0000  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!pipex!warwick!not-for-mail@network.ucsd.edu  
Subject: Why no 10 meter activity??  
To: info-hams@ucsd.edu

There's certainly a lot to be said for plenty of CQ calls and monitoring of 10m beacons, even at what would be considered unusual times of day. There are several 'unusual' propagation modes, affecting high-, middle- and low-latitudes, which are game for exploitation, especially TEP (Transequatorial Propagation) and sporadic-E. TEP uses the large F-region densities at about 15 degrees dip angle north and south of the magnetic equator, allowing a 2F mode without an intermediate ground reflection in a 'tilt' like fashion, giving propagation at higher frequencies than usually expected over distances of 4000 miles or so on north-south low-latitude paths crossing the equator.

Sporadic-E exists at most latitudes for an amount of time depending on time of year. At low latitudes, it may exist for most of the daylight hours throughout the year, so lots of 10m possibilities as the MUFs tend to be high on medium-long range paths. At middle latitudes it's mainly a summer activity, and again during daytime, with a peak of activity around local mid-late morning. June last year saw mid-latitude Es on at least half the days of the month in europe, and no doubt the US too.

At high-latitudes Es is more of a night time phenomenon. The highest MUFs occur late evening, with frequencies up to, and possibly above, 100 MHz being supported. This doesn't seem to be a seasonal effect, and certainly gives high-latitude stations possibilities for 10 and even 6m activity on a regular basis.

So, at low and high latitudes there's no excuse for avoiding 10m. At mid-latitudes it's worth bearing in mind that such modes do exist, although with low solar activity little may be seen except summer Es. There ar possibilities for summer Es combinig with TEP for a bit of DX, as has been seen on 6m on occasions when EU stations have worked southern Africa.

It's also worth bearing in mind that there's still a lot to be understood in this field, and amateur observations do play an extremely important role, at the same time doing no harm to the amateur cause.

Simon GOGWA.

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Date: 25 Mar 94 12:43:26 CST  
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!uwm.edu!src.honeywell.com!The-  
Star.honeywell.com!centurio.mavd.honeywell.com!skyler.mavd.honeywell.com!  
estey@network.ucsd.edu  
Subject: Yaesu 5200 Develops new "Feature"?!  
To: info-hams@ucsd.edu

My 2-year old Yaesu FT-5200 has recently displayed a new, and unique, feature. It turns itself OFF! (Stop the snickering! It happens both in Receive and transmit mode!)

I have vibrated the FT-5200, wiggled the control cable of the seperation kit, with no direct correllation to the failure. Depressing the ON/OFF switch will sometimes not restore normal operation - sometimes the display becomes real dim when I try to turn the power back on - and repeated attempts don't always work. Failures have happened when the unit is ice-cold - and when the unit is warm so thermal problems seem unlikely. I fear sending the unit in as I am not absolutely sure the problem isn't with the cable running between the

main unit under the seat and the control head on the dash.

Has anyone experienced this new Yaesu feature???

Carl

---

Carl Estey		Home Mail Address: 276 Walnut Lane
Amateur Callsign:	WA0CQG	Apple Valley, MN 55124
		Business Address: Honeywell Inc.
Phone: Work	(612) 954-7630	Flight Systems & Test Operations M/S MN15-2370
FAX	(612) 954-7495	1625 Zarthan Ave. S., St. Louis Park, MN 55416
Home	(612) 432-0699	Packet: WA0CQG @ WA0CQG.#MSP.MN.USA.NA

The nonsense here is of my own making - no one else would want credit!

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End of Info-Hams Digest V94 #328

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